Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_

Simplify Variable Expressions

In the Border-Problem you saw that the different methods for solving the problem resulted in different, but equivalent, variable expressions. Equivalent expressions look different but represent the same value. We use the distributive property to simplify variable expressions.

In simplest form the variable expressions are the same.

**The Distributive Property of Multiplication over Addition**

**Like Terms** Like terms have the same variable part. We add like terms by adding their number coefficients. When adding like terms, the variable part of the term does not change.

**Simplify each variable expression by distributing the multiplication and adding “like terms”.**

1.

2.

3.

4.

5.

6. 7. 8.

9. 10. 11.

12. 13. 14.